and page 53, lines 11-18. Support for new claims 38, 40, 46, 48, 54, 56, 62, 64, 70, and 72 appears in the specification on page 3, lines 18-31; page 5, lines 7-22; page 8, lines 1-29; and page 53, lines 11-18. Support for new claims 41, 43, 49, 51, 57, 59, 65, 67, 73, and 75 appears on page 7, lines 14-32; page 10, lines 10-14, 18-22, and 28-31; and page 11, lines 16-18 and 23-25. Support for new claims 42, 44, 50, 52, 58, 60, 66, 68, 74, and 76 appears on page 8, lines 1-19; page 10, lines 10-14, 18-22, and 28-31; and page 11, lines 16-18 and 23-25. Support for new claim 77 appears in claim 35, as well as in the specification on page 8, lines 20-29. No new matter has been added by the above amendment.

35 U.S.C § 102(b)

Claims 33-35 are rejected as anticipated by Fraser *et al.*, *Neuroscience letters*, 124:242-245, 1991.

Amended claims 33-35 now require that the method be performed in a mammalian cell. Fraser *et al.* utilized a whole-mRNA preparation expressed in Xenopus oocytes. They do not teach a method that utilizes a mammalian cell. Therefore, amended claims 33-35 are patentably distinguished over Fraser *et al.* and the rejection should be withdrawn.

New claims 37-77

New claims 37-77 require that the cells contain an expression vector that encodes a high-affinity melatonin receptor protein. Fraser *et al.* utilized a whole ovine pars tuberalis mRNA preparation expressed in Xenopus oocytes. Fraser *et al.* do not teach the present invention of using a cell containing an expression vector that encodes a high affinity melatonin receptor protein. The limitation of an expression vector that encodes a high affinity melatonin receptor protein is, in and of itself, sufficient to distinguish new claims 37-77 over Fraser *et al.*

However, new claims 37-40, 45-48, 53-56, 61-64, and 69-72 have additional bases upon which the claims can be distinguished over Fraser et al.

The cells specified in new claims 37-40, 53-56, 61-64, and 69-72 variously express a *Xenopus laevis* high-affinity melatonin receptor (SEQ ID NO:2), a human 1a high-affinity melatonin receptor (SEQ ID NO:12), a mouse high-affinity melatonin receptor (SEQ ID NO:14), and a human 1b high-affinity melatonin receptor (SEQ ID NO:16) on their cell surfaces,

respectively. Fraser *et al.* teach manipulating an Xenopus oocyte to express an ovine high affinity melatonin receptor on its cell surface. Fraser *et al.* do not teach manipulating a cell such that it expresses an *Xenopus laevis*, a human 1a or 1b, or a mouse high-affinity melatonin receptor, as required by the present claims. Therefore, new claims 37-40, 53-56, 61-64, and 69-72 are patentably distinguished over Fraser *et al.*

New claims 45-48 are further distinguished over Fraser *et al.* because they require that the method be performed in a mammalian cell. Fraser *et al.* utilize Xenopus oocytes and do not teach a method that utilizes a mammalian cell. Therefore, new claims 45-48 are patentably distinguished over Fraser *et al.*

For all of the above reasons, Fraser *et al.* do not teach the claimed invention. Applicants request the withdrawal of the rejection.

Conclusion

Applicants submit that all of the claims are now in condition for allowance, which action is requested. Filed herewith is a check in payment of the excess claims fees required by the above amendments. Please apply any other charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

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